

Attorney Docket: 1674/43755CO
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: WESLEY WILKINSON

Serial No.: NOT YET ASSIGNED Group Art Unit:

Filed: JULY 27, 2001 Examiner:

Title: CONTROL WHEEL ASSEMBLY FOR TROLLEYS

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 4, delete lines 26-27:

Figure 2a is a schematic cross-sectional front view of the control wheel assembly of Figure 1; Figure 2b is a schematic cross-sectional front view of a control wheel assembly having two wheels;.

Page 5, rewrite lines 9 to 19 as follows:

Referring to Figs. 1 and 2 there is shown schematically a preferred control wheel assembly 10 made in accordance with the invention. The assembly 10 includes wheel means 11 (comprising a single wheel in Fig. 2a and a pair of wheels, each able to rotate independently, in Fig. 2b) free to rotate

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only about rotational axis 122, mounted by bracket 13 on to a telescopic member 14 comprising two square tubular sections 15 and 16 made such that section 15 is able to freely slide within section 16. Mounted within the telescopic member 14 is a gas strut 17 attached to the tube sections 15 and 16 by attachment flanges 18. The gas strut 17 provides damped bias to the telescopic movement between the tube sections 15 and 16 and thus to the wheel 11. Mounting flange 19 is provided to permit attachment of the assembly to a trolley (not shown).

Page 7, rewrite lines 1-12 as follows:

(40a, 40b, 40c, ...) which are described in relation to Fig. 6 and 7, and in which like numbers identify like parts. A group of trolleys 50 are nested together (as is the usual requirement for such trolleys) for compact storage and transport. Each of the trolleys includes, as described above in relation to Figs. 6 and 7, a control wheel assembly 10. The ends 46a and 46b of the side frame sections 41a and 41b on the trolleys are turned to slope downwards to form a ramp configured so that the ramp on one trolley engages the lifting lug 20 on another trolley and raises the wheel of the control wheel assembly against the action of the bias means to lift the control wheel from engagement with the ground or travel surface. This allows the group of shopping trolleys to be moved as a whole without the hindrance of the control wheel assemblies of all of the trolleys in the group.

IN THE CLAIMS:

Please cancel Claims 1-20, without prejudice to or disclaimer of the subject matter therein.

Please add new Claims 21-47 as follows:

21. (NEW) A trolley control wheel assembly adapted to be fitted to a trolley having a longitudinal axis of travel and an array of castors having respective castor wheels, said assembly comprising:

a fixed wheel adapted to be disposed in use on a trolley in a vicinity of one of a load center of the trolley and a center of the array of castors, and

a self-contained gas strut independent of the castors and operable to provide controlled contact between the fixed wheel and a surface on which the trolley is intended to travel.

22. (NEW) A trolley control wheel assembly adapted to be fitted to a trolley having a longitudinal axis of travel and an array of castors, said assembly comprising:

a fixed wheel in the vicinity of the load center of the trolley or the center of the array of castors, and

a bias means and a damping means to provide controlled contact between the fixed wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

23. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein the load center of the trolley and the center of the array of castors coincide.

24. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein a force of the bias means is independent of a load on the trolley.

25. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein a force of the bias means does not exceed the weight of an empty trolley.

26. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein the bias means is biased downwards towards the surface on which the trolley is intended to travel.

27. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein the trolley has four castors disposed in the vicinity of the corners of the trolley.

28. (NEW) A trolley control wheel assembly as claimed in Claim 22, wherein the fixed wheel rotates about a horizontal axis but cannot rotate about a vertical axis.

29. (NEW) A trolley control wheel assembly as claimed in Claim 21, wherein in order to facilitate lateral maneuvering of a trolley, said wheel assembly further comprises a lifting means to lift the fixed wheel of the control wheel assembly out of contact with a travel surface to enable the trolley to be readily moved at right angles to a desired direction of movement or travel.

30. (NEW) A trolley having a longitudinal axis of travel, comprising:

an array of castors fitted thereto, and

a trolley control wheel assembly comprising:

a fixed wheel fixed at a position in the vicinity of a load center of the trolley or a center of the array of castors; and

a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

31. (NEW) A cart having a longitudinal axis of travel, comprising:

an array of castors fitted thereto, and

a trolley control wheel assembly which comprises:

a fixed wheel adapted to be disposed in use on a trolley in a vicinity of one of a load center of the trolley and a center of the array of castors, and

a self-contained gas strut independent of the castors and operable to provide controlled contact between the fixed wheel and a surface on which the trolley is intended to travel.

32. (NEW) A trolley as claimed in Claim 30, wherein the load center of the trolley and the center of the array of castors coincide.

33. (NEW) A trolley as claimed in Claim 30, wherein a force of the bias means is independent of a load on the trolley.

34. (NEW) A trolley as claimed in Claim 30, wherein the trolley has four castors disposed in the vicinity of the corners of the trolley.

35. (NEW) A trolley as claimed in Claim 30, wherein in order to facilitate lateral maneuvering of a trolley, said wheel assembly further comprises a lifting means to lift the wheel of the control wheel assembly out of contact with a travel surface to enable the trolley to be readily moved at right angles to the customary desired direction of movement or travel.

36. (NEW) A trolley having a longitudinal axis of travel and having an array of castors on which the trolley can be moved from place to place in a general direction of the longitudinal axis of the trolley, the improvement which comprises:

a control wheel assembly comprising a fixed wheel fixed at a position in the vicinity of a load center of the trolley or a center of the array of castors and a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

37. (NEW) A trolley as claimed in Claim 36, wherein the load center of the trolley and the center of the array of castors coincide.

38. (NEW) A trolley as claimed in Claim 36, wherein a force of the bias means is independent of a load on the trolley.

39. (NEW) A trolley as claimed in Claim 36, wherein the trolley has four castors disposed in the vicinity of the corners of the trolley.

40. (NEW) A trolley as claimed in Claim 36, wherein in order to facilitate lateral maneuvering of a trolley, said wheel assembly further comprises a lifting means to lift the wheel of the control wheel assembly out of contact with a travel surface to enable the trolley to be readily moved at right angles to a desired direction of movement or travel.

41. (NEW) A castored trolley control wheel assembly which includes a fixed wheel, a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

42. (NEW) A trolley control wheel assembly adapted to be fitted to a trolley having a longitudinal axis of travel and an array of castors, said assembly comprising a plurality of wheels fixed in the vicinity of a load center of the trolley or a center of the array of castors, each wheel having a bias means and a damping means to provide controlled contact between the fixed wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

43. (NEW) A trolley having a longitudinal axis of travel, comprising:

an array of castors fitted thereto, and

a trolley control wheel assembly comprising a plurality of wheels fixed at a position in the vicinity of a load center

of the trolley or a center of the array of castors, each wheel having a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

44. (NEW) A trolley having a longitudinal axis of travel and having an array of castors on which the trolley can be moved from place to place in a general direction of the longitudinal axis of the trolley or otherwise, the improvement which comprises:

a control wheel assembly comprising a plurality of wheels fixed at a position in the vicinity of a load center of the trolley or a center of the array of castors, each wheel having a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

45. (NEW) A castored trolley control wheel assembly which includes a plurality of fixed wheels, each wheel having a bias means and a damping means to provide controlled contact between the wheel and a surface on which the trolley is intended to travel, wherein the bias means and the damping means jointly comprise a self-contained gas strut independent of any other wheel.

46. (NEW) A trolley control wheel assembly adapted to be fitted to a trolley having a longitudinal axis of travel and an array of castors having respective castor wheels, said assembly comprising:

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a fixed wheel adapted to be disposed in use on a trolley;
a self-contained gas strut independent of the castors and
operable to provide controlled contact between the fixed wheel
and a surface on which the trolley is intended to travel; and
a castor wheel on each side of the self-contained gas
strut.

47. (NEW) A trolley control wheel assembly adapted to
be fitted to a trolley having a longitudinal axis of travel
and an array of castors having respective castor wheels, said
assembly comprising:

two fixed wheels, each fixed wheel adapted to be disposed
in use on a side of a trolley chassis;

two self-contained gas strut independent of the castors,
wherein each self-contained gas strut is coupled to a fixed
wheel and is operable to provide controlled contact between
the fixed wheel and a surface on which the trolley is intended
to travel.

REMARKS

Claims 21-47 are pending herein. By this Amendment,
Claims 1-20 are canceled, and new Claims 21-47 are added.

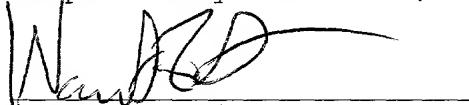
If there are any questions regarding this Amendment or
the application in general, a telephone call to the
undersigned would be appreciated since this should expedite
the prosecution of the application for all concerned.

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If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #1674/43755CO).

Respectfully submitted,

July 27, 2001


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ATTACHMENT WITH MARKED-UP VERSION SHOWING CHANGES MADE

Page 4, delete lines 26-27:

[Fig. 2 is a schematic cross-sectional front view of the control wheel assembly of Fig. 1] Figure 2a is a schematic cross-sectional front view of the control wheel assembly of Figure 1; Figure 2b is a schematic cross-sectional front view of a control wheel assembly having two wheels;.

Page 5, rewrite lines 9 to 19 as follows:

Referring to Figs. 1 and 2 there is shown schematically a preferred control wheel assembly 10 made in accordance with the invention. The assembly 10 includes wheel means 11 (comprising a single wheel in Fig. 2a and a pair of wheels, each able to rotate independently, in Fig. 2b) free to rotate only about rotational axis 122, mounted by bracket 13 on to a telescopic member 14 comprising two square tubular sections 15 and 16 made such that section 15 is able to freely slide within section 16. Mounted within the telescopic member 14 is a gas strut 17 attached to the tube sections 15 and 16 by attachment flanges 18. The gas strut 17 provides damped bias to the telescopic movement between the tube sections [25] 15 and 16 and thus to the wheel 11. Mounting flange 19 is provided to permit attachment of the assembly to a trolley (not shown).

Page 7, rewrite lines 1-12 as follows:

(40a, 40b, 40c, ...) which are described in relation to Fig. 6 and 7, and in which like numbers identify like parts. A group of trolleys 50 are nested together (as is the usual requirement for such trolleys) for compact storage and transport. Each of the trolleys includes, as described above

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in relation to Figs. 6 and 7, a control wheel assembly 10. The ends 46a and 46b of the side frame sections 41a and 41b on the trolleys are turned to slope downwards to form a ramp configured so that the ramp on one trolley engages the lifting lug 20 on another trolley and raises the wheel of the control wheel assembly against the action of the bias means to lift the control wheel from engagement [engage] with the ground or travel surface. This allows the group of shopping trolleys to be moved as a whole without the hindrance of the control wheel assemblies of all of the trolleys in the group.